



Technical Support Working Group Combating Terrorism Technical Support Office Technical Brief **Tactical Timed Firing Device**

Background: Stratom, Inc. has improved and is producing the Tactical Timed Firing Device (TTFD) under license from the Technical Support Working Group, which originally had the basic device designed by Idaho National Laboratory. The original need for this device was an inexpensive device to destroy unexploded ordnance/bomblets on runways for Air Force use. That requirement evolved into the current design which has been evaluated by the Air Force and is available for a wider use in a full spectrum of EOD and bomb squad operations.

Requirement or Problem: Develop and test a small reliable, multi-environmental use, self-contained timed firing device capable of initiating multiple size shock-tubes, and conventional blasting caps, which facilitates the disruption of improvised explosive devices (IED). The device will be used by military and civilian bomb disposal personnel.

Technical Description: Stratom's SF-400 Tactical Timed Firing Device (SF-400™) provides military EOD, civilian bomb disposal technicians, SOF, and tactical operations / SWAT teams a small, reliable, timed firing device to initiate energetic charges and tools. The device is capable of firing multi-sized shock tubes, electrical blasting caps, or electrically primed cartridges.

Advantages & Limitations: The SF-400™ can be ready for use in under a minute, uses a standard 9 volt battery for power, and operates in extreme climactic conditions. Additionally, the SF-400™ provides an inexpensive alternative to radio-frequency (RF) remote firing devices in situations where RF transmissions are prohibited.



The Tactical Timed Firing Device has been designed to initiate either a shock tube or a standard blasting cap, after a countdown time has expired. The countdown time is determined and set by the operator. It uses automatic discrimination between shock tube and electrical blast connectors to determine which system to fire. It features a ruggedized weather resistant design, however it is not water proof and is not designed to operate in submerged conditions.

Applications: The Tactical Timed Firing Device can be utilized to perform multiple missions including:

- Explosive Ordnance Disposal (EOD)
- Airfield Clearance Operations
- IED and UXO Disposal
- Bomb Disposal
- Timed Explosive Operations
- Breaching Operations
- Tactical Diversionary Operations

Specifications

SF-400™ Product Specifications:	
Mechanical	
Overall dimensions	1.0" x 2.75" x 5.1" (26 x 70 x 130mm) (H x W x L)
Weight	6.5 ounces (184 grams)
Connection wire use with electrical connectors	20 gauge, solid or stranded with PVC insulation
Shock tube connector	18 gauge, stranded with PVC insulation
Operational temperature range	Collet type 2mm to 3.8mm
Storage temperature range	- 4°F to 131°F (-20°C to +55°C)
Humidity	-22°F to 158°F (-30°C to +70°C)
Color	0% to 95%
Electrical	
Battery	Black with white lettering
Firing energy	Standard 9 volt alkaline battery
Features	
Minimum set time	4.0 Joules at full energy
Maximum set time	15 seconds
Default set time	59 minutes and 59 seconds
Display	2 minutes and 30 seconds
Charging Indicator	4 Digit, Super Bright, Red, 7-segment LED
	Red LED

Test and Evaluation Results: The TTFD has been evaluated and approved for use by the U.S. Air Force Non-Nuclear Munitions Safety Board, and is currently in extended operational testing. A report on the evaluation is expected to be available in March 2011.

Acquisition and Support Pricing:

The SF-400™ is delivered as individually packaged units in standard 1 or 5 packs, including Operations Manual. Contact the company for pricing.

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